

SUBPART 3 - BUREAU OF PLANT INDUSTRY
CHAPTER 10 - Crop Spraying and Licensing of Aerial Applicators
Subchapter 2
Regulation of Application by Aircraft of Pesticides

APPLICABILITY

200.01 These regulations are adopted pursuant to the authority granted in Miss. Code Of 1972, Section 69-23-109(1), (4) and apply to the aerial application of agricultural pesticides in Mississippi. All persons engaged in such activities must comply with these regulations.

DEFINITIONS

201.01 As used in these regulations, the following terms shall have the meanings hereinafter ascribed to them.

201.01(1) "Aerial application" means the practice of engaging in agricultural aircraft operations for remuneration.

201.01(2) "Agricultural aircraft operation" means: Dispensing any pesticide, by aircraft;

201.01(3) "Aircraft" means any contrivance now known or hereafter invented that is used or designed for navigation of or flight in the air over land and water, and that is designed for or adaptable for use in agricultural aircraft operations.

201.01(4) "Applicator" means any person, as herein defined, who is licensed under this article to engage in agricultural aircraft operations.

201.01(5) "Board" shall mean the advisory board of the Bureau of Plant Industry, a division of the Mississippi Department of Agriculture and Commerce.

201.01(6) "Chief Pilot" means the person designated by an applicator to serve as chief pilot and the supervisor of agricultural aircraft operations for an applicator.

201.01(7) "Commissioner" means the Commissioner of the Mississippi Department of Agriculture and Commerce.

201.01(8) "Defoliant" means any substance or mixture of substances intended for causing the leaves or foliage to drop from a plant, with or without causing abscission.

- 201.01(9) "Department" means the Mississippi Department of Agriculture and Commerce.
- 201.01(10) "Desiccant" means any substances or mixtures of substances intended for artificially accelerating the drying of plant tissues.
- 201.01(11) "Herbicide" means a chemical used for killing plants or severely interrupting their normal growth processes.
- 201.01(12) "Insect" means any of the numerous small invertebrate animals generally having the body more or less obviously segmented, for the most part belonging to the Class Insecta, comprising six-legged, usually winged forms, as for example, beetles, bugs and flies; and to other classes of arthropods whose members are wingless and usually have more than six (6) legs, as for example, spiders, mites, ticks, centipedes and wood lice.
- 201.01(13) "Person" shall mean any individual, corporation, firm, partnership, company, trust, association or other legal entity.
- 201.01(14) "Pesticide" means any substance or mixture of substances intended for preventing, destroying, repelling, mitigating or attracting any pests; and shall also include adjuvants intended to enhance the effectiveness of pesticides; and any substance or mixture of substances intended for use as a plant regulator, defoliant or desiccant.
- 201.01(15) "Pilot" means the operator of an aircraft used in agricultural aircraft operation; provided, however, a pilot may also be a person who is licensed as an applicator under the provisions of this article.

INITIAL APPLICATION FOR A LICENSE

202.01 Applicator - Any person who intends to conduct, or engage in the practice of aerial application, as defined above, in the State of Mississippi shall first make application for and obtain an applicator's license from the Department on a form prescribed by the Department and said applicant shall:

- 202.01(1) Designate the name under which the applicant will do business;
- 202.01(2) Designate a person who will serve as chief pilot, as required by Section 203.01(1);

- 202.01(3) Furnish proof of registration with the Federal Aviation Administration (FAA) under FAR Part 137;
 - 202.01(4) List all aircraft by make, model, and N number to be used with current licensure;
 - 202.01(5) Either pass a written examination administered by the Board or furnish proof of certification in accordance with Section 203.01(2);
 - 202.01(6) Submit proof of payment of all ad valorem and other taxes which might be applicable on aircraft and other equipment to be used;
 - 202.01(7) List all pilots with current licensure, and rating;
 - 202.01(8) Submit proof of financial responsibility as outlined in Section 204;
 - 202.01(9) Establish proof of residency in accordance with Section 205 or appoint a resident agent for service of process in accordance with Section 206;
 - 202.01(10) File a proposal of intended operation or activity;
 - 202.01(11) Register all aircraft and pilots in accordance with Section 208; and
 - 202.01(12) Submit a copy of a photographic identification card.
- 202.02 Pilot - Each person who intends to personally operate an aircraft engaged in agricultural aircraft operations in or over the State of Mississippi shall first make application for and obtain a pilot's license from the Department on a form prescribed by the Department for that purpose. A licensed pilot must also be licensed as, or be employed by, a licensed applicator. Said application shall contain:
- 202.02(1) The name of the pilot;
 - 202.02(2) The name of the firm for which the person will act as a pilot;
 - 202.02(3) The pilot's FAA Commercial License Number, rating and date of medical which must be current;
 - 202.02(4) A resume of experience;
 - 202.02(5) The method to be used to meet the competency requirements; and

202.02(6) A copy of a photographic identification card.

INITIAL LICENSING REQUIREMENTS

203.01 Applicator - Each applicant for a license to act as an applicator to conduct agricultural aircraft operations shall:

203.01(1) Designate a person who meets the requirements of Section 203.03 to serve as chief pilot and supervisor of operations, which may be the applicant, or some other person;

203.01(2) The applicant or his designated agent must demonstrate competency by passing a written examination administered by the Department. The examination will cover aerial application methods and procedures in general, and include the standards for certification of applicators as set forth in Code of Federal Regulations, Chapter 40, Section 171.4 (40 CFR §171.4). The examination may be waived if the applicant is currently licensed to conduct agricultural aircraft operations in another state with standards equal to those of Mississippi, provided that said state recognizes such examinations given by Mississippi;

203.01(3) Have available the services of at least one aircraft registered by the Department in accordance with Section 208.01 and one pilot currently licensed by the Department in accordance with Section 208.02;

203.01(4) Hold a current agricultural aircraft operator's certificate from FAA under FAR Part 137;

203.01(5) Submit proof of financial responsibility to the Department, and upon obtaining a license, such person shall maintain proof of financial responsibility at all times while such license is in effect, in accordance with Section 204;

203.01(6) Provide proof of payment of all ad valorem and other taxes, which might be applicable on aircraft and other equipment;

203.01(7) Establish proof of residency in accordance with Section 205 or appoint a resident agent for service of process in accordance with Section 206; and

- 203.01(8) Register with the Department all aircraft and pilots used in agricultural aircraft operations in Mississippi.
- 203.02 Pilots - Each applicant for a license to act as a pilot shall:
- 203.02(1) Demonstrate competency by passing a written examination administered by the Department or submit proof of certification from another state;
 - 203.02(2) Hold a current commercial or airline transport pilot certificate from FAA; and
 - 203.02(3) Have current medical date and rating for type of aircraft to be operated.
- 203.03 Chief Pilot - Each person who is designated a chief pilot shall:
- 203.03(1) Have at least 500 hours of commercial agricultural aerial application flying time as pilot-in-command, and two years experience either as a chief pilot or under the direct supervision of a chief pilot in accordance with FAR 137 and in accordance with governing state laws in the state or states where the experience was gained, and be able to show proof thereof. Proof of experience may consist of a notarized affidavit from one of the following persons who has personal knowledge of the designee's experience: another applicator, a state or federal regulatory official, or an officer of a State or National Agricultural Aviation Association, or any other person as may be acceptable to the Department;
 - 203.03(2) Hold a current commercial or airline transport pilot certificate from FAA;
 - 203.03(3) Hold/possess a Current Second (2d) Class medical. If an applicator that is also the owner serving as chief pilot loses his or her second class medical, he or she may continue to serve as chief pilot of said operation as long as he or she maintains good standing with the Department;
 - 203.03(4) Submit proof from FAA that the person has met the knowledge and skill tests requirement and is competent to serve as chief pilot in accordance with FAR 137;
 - 203.03(5) Pass a written examination administered by the Department;

203.03(6) Make regular checks on operation and record keeping to assure compliance; and

203.03(7) Instruct each pilot and ascertain that he or she is knowledgeable of the responsibilities for compliance with all state and federal regulations pertaining to agricultural aircraft operations.

203.04 Grandfather provisions

203.04(1) Any current pilot or chief pilot license issued by the Agricultural Aviation Board will be honored by the Department until March 31, 2009.

203.04(2) Any aircraft currently registered with the Aviation board will be honored by the Department until March 31, 2009.

FINANCIAL RESPONSIBILITY

204.01 Each applicant for a license as an applicator in Mississippi shall submit proof of financial responsibility to the Department, and upon obtaining a license, such person shall maintain proof of financial responsibility at all times while such license is in effect.

204.02 The minimum amount of insurance or bond coverage required for each licensed applicator is:

- \$100,000 Bodily injury for any one person;
- \$300,000 Bodily injury for any one occurrence, and
- \$100,000 Property damage for any one occurrence for each aircraft registered.

204.03 Proof of financial responsibility may consist of:

204.03(1) Delivery to the Department of a surety bond in favor of any person or persons who may suffer damage by reason of the operation of an aerial application service, issued by a corporate surety company authorized to do business in this state, which surety bond shall be in an amount not less than the amounts of financial responsibility required by Section 204.02 of this regulation. However, the aggregate liability of the surety to all such persons shall not, in any event, exceed the amount of such bond;

- 204.03(2) Delivery to the Department of an insurance policy of an insurer or surplus lines broker authorized to do business in this state insuring the licensee and any of his agents against liability resulting from the operation of an aerial application service, which insurance policy shall be in the minimum amount of \$100,000 for bodily injury for any one person, \$300,000 bodily injury for any one occurrence and \$100,000 for property damage for any one occurrence for each aircraft registered with the Department; or
- 204.03(3) Such other financial instrument as the Department may determine to be appropriate, so long as the Department determines that such instrument provides assurance of financial responsibility not less than the amounts of financial responsibility required by Section 204.02 of this regulation.

PROOF OF RESIDENCY

- 205.01 Resident applicators must establish proof of residency in the State of Mississippi. Proof of residency may be established by any one of the following:
- 205.01(1) A statement from the local circuit clerk certifying that the applicant is a qualified elector in that county;
- 205.01(2) A statement from the local tax assessor certifying that the applicant filed for homestead exemption for the current year;
- 205.01(3) A statement from the local sheriff certifying that the applicant owns, and regularly pays taxes on, real or personal property in his home county. If proof of residency cannot be established, it will be necessary for the applicant to appoint a resident agent as outlined for non-resident applicants in Section 206 of this regulation; or
- 205.01(4) Any other proof of residency as may be acceptable to the Department.

LICENSING OF NON-RESIDENT APPLICATORS

- 206.01 Any person who is a non-resident of this state shall obtain an applicator's license from the Department before operating as an applicator in Mississippi. In addition to obtaining an applicator's license, a non-resident applicator~~s~~ shall:

206.01(1) Designate and maintain a resident agent in Mississippi for service of process. The power of attorney appointing such resident agent shall be in such form as to render effective the jurisdiction of the courts of the State of Mississippi over such non-resident and make such licensee amenable to the jurisdiction of the courts of Mississippi. The resident agent may be the Secretary of State, or any other duly appointed resident upon whom process may be served. A copy of the power of attorney must be certified by the office of the Secretary of State and filed with the Department. Power of attorney forms for appointing a resident process agent will be furnished by the Department.

206.01(2) Establish and maintain proof of financial responsibility as outlined in Section 204.

INSPECTION OF AGRICULTURAL AIRCRAFT OPERATION

207.01 The Department's employees may enter and inspect any agricultural aircraft operation licensed hereunder, as well as aircraft, equipment, records, licenses, and related items, during normal business hours without advance notice. The Department may also make copies of any records and obtain and analyze any materials in order to determine if the operation is in compliance with these regulations.

FEEES FOR LICENSES

208.01 A fee, of One Hundred Fifty (\$150) dollars for each aircraft owned, operated, used and employed in aerial application by an applicator shall be paid to the Department for the issuance or required annual renewal of a license for an applicator. Each aircraft shall be identified at all times by a decal supplied to the registered applicator by the Department,

208.02 A fee, of One Hundred Fifty (\$150) dollars for each pilot engaged in aerial application shall be paid to the Department for the issuance or required annual renewal of a license for a pilot. Each pilot shall have in his possession at all times an identification card supplied by the Department.

ISSUANCE OF LICENSES

209.01 Upon receipt and approval of an application with appropriate related documents and payment of the applicable fees, the Department shall issue licenses as set forth below:

- 209.02 Each applicator shall be issued a license as an applicator to conduct agricultural aircraft operations in Mississippi in accordance with and subject to the provisions of Miss. Code of 1972, §69-23-109(4) and the regulations adopted by the Department.
- 209.03 Each aircraft shall be identified at all times by a decal supplied to the applicator by the Department.
- 209.04 Each pilot shall be issued a license, which will also serve as an identification card, identifying him or her as a registered pilot and/or chief pilot as the case may be. Each pilot shall have this card in his or her possession at all times when engaged in aerial application activities.
- 209.05 All licenses shall expire on the 31st of March of the year following their issuance and shall be renewed for the ensuing year on or before that date.

ADDITIONAL AIRCRAFT AND PILOTS, DELETIONS, AND TRANSFERS

- 210.01 Licensed applicators may add or delete aircraft and pilots, or transfer the registration fee to substitute aircraft, at any time during the license period in accordance with these guidelines:
- 210.02 Additional aircraft may be added by filing a form to register additional aircraft, paying the applicable registration fee, and submitting proof of financial responsibility coverage.
- 210.03 Aircraft may be deleted by notifying the Department
- 210.04 The registration fee for a deleted aircraft may be transferred to a substitute or replacement aircraft by requesting such transfer on a form prepared for that purpose and paying a transfer fee of \$10.00 for a new decal for the substitute or replacement aircraft.
- 210.05 The registration fee and decal for an aircraft may be transferred to a new owner by requesting such transfer on a form prepared for that purpose and paying a transfer fee of \$10.00, provided the new owner is a currently registered applicator. The registration fee and decal cannot be transferred to a person who is not a currently registered applicator.
- 210.06 Additional pilots may be added by filing a request with the Department on a form prepared for that purpose, provided that the applicant is currently licensed and registered with the Department. If the applicant does not hold a current license from the Department, the form for adding additional pilots must

be accompanied by an application for a pilot's license as outlined in Section 202.02, along with the documentary evidence of compliance and the appropriate fee.

210.07 A new chief pilot may be designated at any time by filing a request with the Department on a form prepared for that purpose, provided the new chief pilot is currently approved by the Department to serve in that capacity. The form for a new chief pilot must be accompanied by proof that the new chief pilot is approved by FAA to serve as chief pilot for the applicator, as provided in Section 203.03. If the new chief pilot is not currently approved by the Department to serve in that capacity, the form must be accompanied by all the documentary evidence listed in Section 203.03.

210.08 If an applicator's chief pilot were to lose his or her second (2ND) class medical he or she would have a period of twelve (12) months to obtain a current second (2ND) class medical or the applicator will have to designate a new chief pilot per Section 210.07.

RENEWAL OF LICENSES

211.01 Licenses shall be effective for a period of one (1) year. Any licensee wishing to have a license renewed must submit an application for renewal with the Department at least thirty (30) days before the expiration of the license. If the applicant submits a timely and complete application for renewal, and the Department, through no fault of the applicant, fails to reissue the license on or before the expiration date of the existing license, the existing license shall remain in effect until final action on the renewal application is taken by the Department. Licenses are subject to modification, revocation or reissuance for cause at any time during the effective dates of the license. In addition to submitting an application, a licensee shall:

211.01(1) Pay the applicable fees;

211.01(2) Provide proof of maintenance of certification on an annual basis, which may consist of attendance at an approved training session, or retesting, to be determined by the Department;

211.01(3) Provide proof of maintenance of financial responsibility (applies only to applicators);

PROCESSING OF APPLICATION, DENIAL OF LICENSE

212.01 Upon receipt of an application for a license, the Department shall review the application for compliance with the act and these regulations, and either approve or disapprove the application. If the Department disapproves the application, the applicant shall be notified in writing of the reasons therefore, and given an opportunity to amend the application. The Department shall be afforded an opportunity and reasonable time to investigate or verify any information or claims made on an application, and may ask the applicant for additional supporting information in order to assure that these regulations and the law are complied with.

RECORDS

213.01 Applicators shall keep and maintain for two years of all records of any applications of pesticides, which may contain the following information:

213.01(1) The date the application was made;

213.01(2) The brand name of the pesticide applied and the rate of application (lb / acre; quarts / acre);

213.01(3) The crop/site to which the application was made;

213.01(4) The target pest, if applicable;

213.01(5) Number of acres sprayed;

213.01(6) Location of site and owner;

213.01(7) Wind direction and speed;

213.01(8) Name of pilot and N No. of aircraft;

213.01(9) Any accidents, aborted loads, or unusual circumstances or occurrences during the application;

213.01(10) EPA registration number of pesticide being applied

213.01(12) Other information as may be required by the Department.

213.02 All glyphosate application records shall include a physical measurement for the following meteorological data:

- a. Location of the application site (latitude and longitude)
- b. Wind speed
- c. Wind direction

d. Temperature

213.03 Each glyphosate product application recorded by means of an on-board differentially corrected Global Positioning System (GPS) as defined in Section 217.03 shall include the following data:

- a. Date and time of day of each application
- b. Swath width
- c. Physical location (latitude and longitude)
- d. Altitude
- e. Complete tracking of aircraft from take-off to landing
- f. Spray on/off delineation - coordinated on application map
- g. Job location/file name
- h. Aircraft registration number
- i. Pilot identification

213.04 The data described in this section shall be provided to the Department in electronic and hard copy format upon request of the Department. Data shall be archived for 24 months from date of application.

213.05 Any applicator who applies glyphosate must maintain a single written statement of the following information stating the conditions under which all glyphosate applications will be made, for purposes of demonstrating compliance with Section 216.01(2) of this Regulation:

213.05(1) specific nozzle type and size, direction of spray as it leaves the nozzle (i.e., straight back = 0° ; down-and-back at 45° = 45° ; straight down = 90° ; etc);

213.05(2) boom pressure, (psi);

213.05(3) the name(s) and amount(s) of any additives (amount per 100 gallons of spray) in the spray tank;

213.05(4) aircraft speed (mph) while spraying field(s);

213.05(5) swath width (ft.);

213.05(6) number of nozzles delivering spray, and

213.05(7) VMD and source of VMD information.

LICENSE AND PESTICIDE VIOLATIONS

214.01 It shall be unlawful for any person to:

214.01(1) Act, operate, or do business as an applicator or pilot, or to engage in agricultural aircraft operations, without first obtaining an applicator's or pilot's license from the Department;

214.01(2) Act, operate, or do business as an applicator or pilot in violation of any rule or regulation adopted by the Department in accordance with Section 69-23-109(1), (4)Mississippi Code of 1972 as amended; or

214.01(3) Violate the provisions of any other applicable law.

DISCIPLINARY ACTIONS FOR VIOLATIONS

215.01 If any person shall violate the terms of Miss. Code of 1972, §69-23-109(4) or any of the regulations promulgated thereunder, the administrative procedures described in Miss. Code of 1972, 69-25-51 to 65 shall be followed. Disciplinary action may be taken by the Department if it finds that a person has committed any of the following acts or omissions, to-wit:

215.01(1) Has made a misrepresentation for the purpose of defrauding;

215.01(2) Has made false statements or representations in his application for issuance or renewal of a license;

215.01(3) Has violated any pesticide law or the regulations promulgated by the Department;

215.01(4) Has made any application in a careless or negligent manner;

215.01(5) Has used or applied any pesticide in a manner which is inconsistent with its labeling;

215.01(6) Has neglected or refused to keep and maintain records required by these regulations, or refused or neglected to make reports when required;

215.01(7) Has made false or fraudulent records, invoices, or reports;

215.01(8) Has aided or abetted any person in evading the provisions of any law or regulation, or allowed his

license to be used by an unlicensed person;

215.01(9) Has violated the Federal Insecticide, Fungicide and Rodenticide Act;

215.01(10) Has performed work in a category for which he is not licensed;

215.01(11) Has been convicted in any of the courts of this state for a violation of any pesticide law or these regulations;

215.01(12) Has refused to yield a pesticide sample to the Department or its employees;

215.01(13) Has failed to renew the bond or insurance required in these regulations to maintain financial responsibility, which will result in the automatic cancellation of his license; or

215.01(14) Has applied a pesticide in such a manner that allowed it to drift from a target site to a non-target site.

SPRAY EQUIPMENT

216.01 In order to minimize spray drift via the wingtip/rotortip vortex, the distance between the outermost nozzles shall not exceed seventy (70) percent (%) of the wingspan/rotorspan, except for aircraft equipped for standard mosquito control applications and helicopters equipped with nozzles delivering sprays with a 750 micron or larger volume median diameter according to the USDA ARS College Station, TX models, or data from nozzle manufacturers.

216.02 Only equipment, operating conditions, and tank mixes that will produce a volume median diameter droplet size of 300 microns (μm) or larger as determined by use of the appropriate USDA ARS (College Station, TX) atomization model (<http://apmru.usda.gov/downloads/downloads.htm>), or data from nozzle manufacturers, without consideration of any tank mix adjuvants, will be allowed for applications of glyphosate. This rule does not apply to standard mosquito control applications.

Application of Pesticides

217.01 Unless otherwise restricted by regulation or labeling, the application of herbicides is prohibited when the wind speed is over ten (10) miles per hour.

- 217.02 Any pilot who applies glyphosate products with a fixed wing aircraft must have at least 500 hours of commercial agricultural aerial application flying time.
- 217.03 Any applicator and/or pilot who applies glyphosate products in the following counties Bolivar, Carroll, Coahoma, DeSoto, Grenada, Holmes, Humphreys, Issaquena, Leflore, Panola, Quitman, Sharkey, Sunflower, Tallahatchie, Tate, Tunica, Warren, Washington and Yazoo between the dates of February 1 and September 1 of each year must utilize in each registered aircraft an on-board differentially corrected Global Positioning System (GPS) capable of electronically recording and post processing into hard copies flight information related to each application of glyphosate products.
- 217.04 All applicators and/or pilots shall have meteorological equipment at each base of operation capable of physically measuring and recording (1) the location of the application site (latitude and longitude), (2) wind speed, (3) wind direction, and (4) temperature or have access to a recognized meteorological reporting station, within a 10 nautical mile radius of each base of operation, for the purpose of providing (1) physical measurement of the station location (latitude and longitude), (2) wind speed, (3) wind direction and (4) temperature.